TransactIQ Team

Team Members

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Client Info

Business Requirements

- BR1 : This will save time and money for Accutech. Currently, "the Implementation Services team remaps all existing data to fit our database schemas, which can sometimes take months".
- BR2 : Makes integrating new systems in the future easier. This feature will allow for new integrations to be tested, verified, and mapped automatically.

Use Cases

- UC1: Translate data
  - The purpose of the program itself. We need to take incoming data and suggest where the data goes in an in-house system.
  - Accutech employees would use this.
  - The program takes in a set of data through file input or direct input. The user presses translate, and another window pops up that suggests where to put the data. The confidence is displayed next to the predicted data place.
  - This satisfies BR1, as it speeds up the process that employees go through that takes way too much time
- UC2: See data input
  - Displays the data input with data values. This allows the user to see the original unedited data. It also allows direct comparison with the output, to see if the data was mapped correctly.
  - Accutech employees would use this to see where data points were mapped.
  - Users can select a list of data that was just translated, then they press a button to see what the input data for that entry looks like. It is placed side by side with the output data to compare the data.
  - This satisfies BR1 as it allows easy access to the input data so that employees can see where everything is mapped. And BR2, as it allows for human verification.

Requirements

- FR1: Needs a front-end in vue version 3. HIGH
- FR2: Needs a back-end API in C# version 6. HIGH
- FR3: Back-end API needs machine learning for incoming data. MEDIUM
- FR4: Front-end needs a file input. HIGH
- FR5: Front-end needs stats on the inputted file. HIGH
- FR6: Needs a user login system. LOW

- NR1: Incoming data needs to be in a TBD file type. HIGH
- NR2: Outgoing data is exported to a postgreSQL database. LOW

First Iteration Features

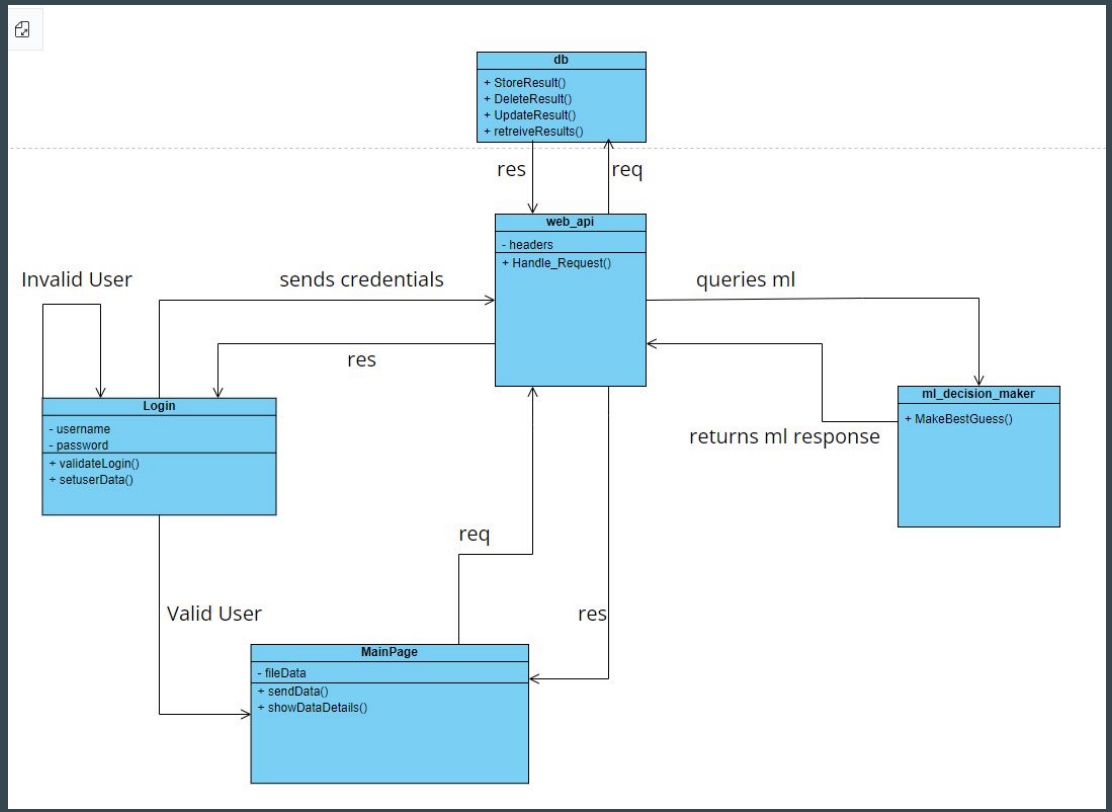
- FR1: The system shall take in a file or user input. HIGH
- FR2: The system shall display the characteristics it finds within the data. HIGH
- FR3: The system shall be a web application. MEDIUM

- NR1: The system shall have a distinct look in the UI. LOW
- NR2: The UI and Logic shall be separate. MEDIUM

TechStack

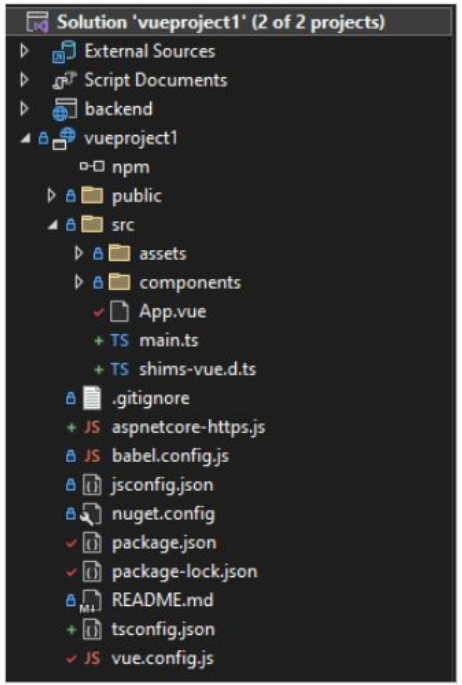
- .NET 6
- PostgreSQL 13
- Vue 3

Domain Model

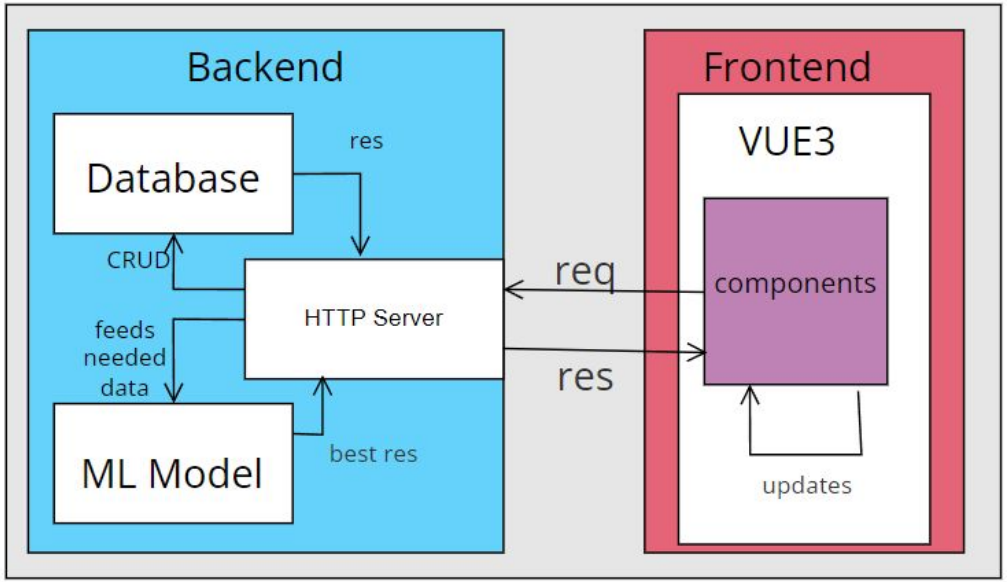


Architecture

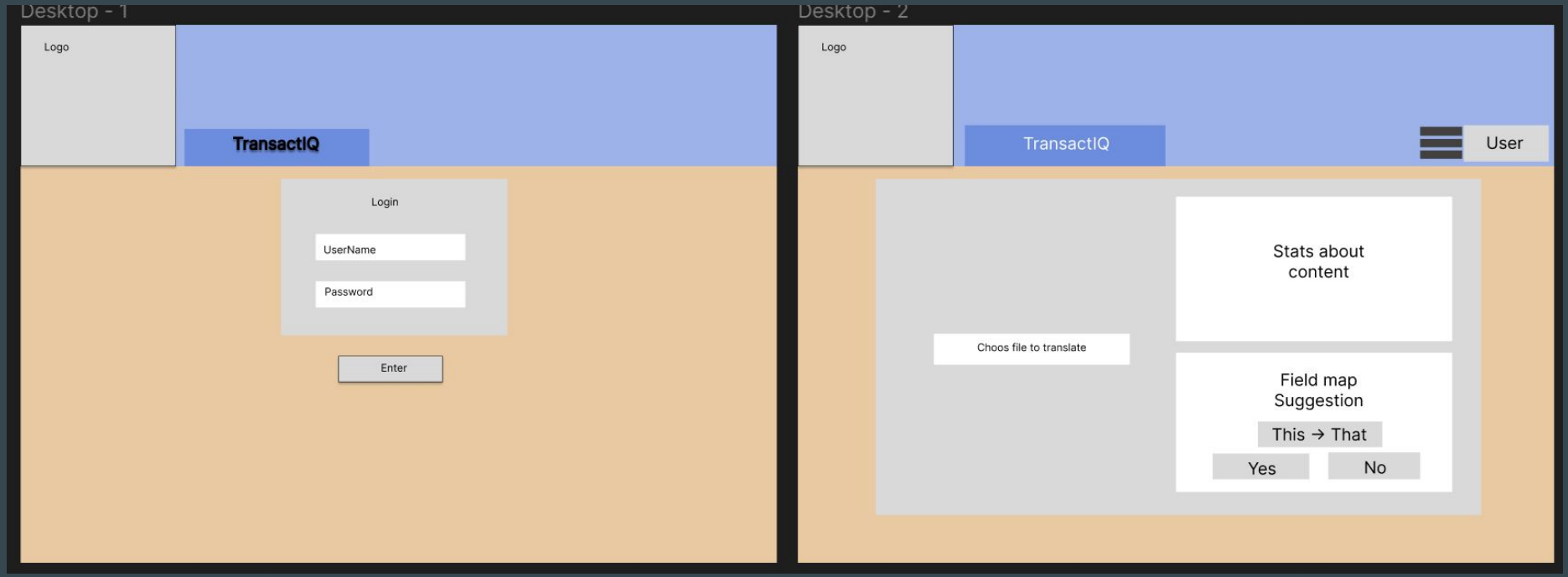
File Structure



Monolith



Prototype


Desktop - 1
Logo
TransactIQ
Login
UserName
Password
Enter
Desktop - 2
Logo
TransactIQ
User
Choos file to translate
Stats about content
Field map Suggestion
This → That
Yes
No

Mentor Feedback

- Provided many tutorials
- Clarified:
  - When we're getting test data
  - General functionality of the project
  - The process that we are automating

Client Feedback

- First iteration should be simple
- After this, we will feel out the way forward
- Mainly focused on the Front end and API setup this time
- Clarified:
  - Why we need machine learning
  - The type of application
  - What platforms will be used

"The UI is quite simple, client will easily figure it out"

Client: